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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,007	09/11/2003	Everett A. Corl JR.	RPS920020032US1	8599

26675   7590   04/30/2007
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ART UNIT	PAPER NUMBER
2109	

MAIL DATE	DELIVERY MODE
04/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 April 2007_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-35_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-35_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _11 September 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 1-10 and 22-29** rejected under 35 U.S.C. 103(a) as being unpatentable

over Zenchelsky et al. (US 6,173,364) in view of Spinney et al. (US 6,226,267).

Regarding **claim 1**, Zenchelsky et al. discloses a method for managing traffic in a

communications network comprising acts of: (a) providing, in a network device, a cache

containing at least predefined characteristics associated with packets and actions

paired with selected ones of said predefined characteristics (column 3, lines 63-67 and

column 4, lines 1-2, where the key is a predefined characteristic and actions are paired

together with it in the cache, the cache being used for filtering packets in a

communication network, and is in a network device as seen in column 1, lines 51-59, a

network device being a filter); (b) receiving at least one of the packets in said network

device (column 1, lines 60-62); (c) selecting, from said received packet, characteristics

similar to the at least predefined characteristics (column 1, lines 60-66); and (d)

correlating the characteristics selected from said received packet with the

predefined characteristics (column 4, lines 2-6). Zenchelsky et al. does not disclose

using the results from the correlating step to perform Layer 3 or higher classification of

the received packet. The general concept of using a cache containing predetermined packet characteristics and their associated actions to classify Layer 3 or higher packets is well known in the art as illustrated by Spinney et al. Spinney et al. teaches a system where packets classification is performed at Layer 3 or higher (column 2, lines 18-28, where the system classifies Layer 4 packets), and the system uses a cache table to classify packets by using already seen packets for assistance (column 8, lines 38-45, where a packets is hashed and matched against previous flows of packets). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Zenchelsky et al. with Layer 3 or higher packet classification as taught by Spinney et al. in order to increase the efficiency of packet classification as to increase bandwidth to streaming applications as noted in Spinney et al.'s disclosure in column 2, lines 2-15.

Regarding **claim 2**, Zenchelsky et al. and Spinney et al. disclose the method of claim 1, and Zenchelsky et al. further teaches wherein the process includes enforcing the paired action against the received packet if the characteristics of said received packet matches the at least predefined characteristics (column 4, lines 6-8).

Regarding **claim 3**, Zenchelsky et al. and Spinney et al. disclose the method of claim 1 or claim 2, and Zenchelsky et al. further teaches wherein the at least predefined characteristics include Internet Protocol (IP) Destination Address (DA), IP Source Address (SA), Transmission Control Protocol (TCP) Destination Port (DP) and TCP Source Port (SP) (column 2, lines 1-25, with the filtering being based on source address and port and destination address and port).

Regarding **claim 4**, Zenchelsky et al. and Spinney et al. disclose the method of claim 1, and Zenchelsky et al. further teaches wherein the correlating act includes comparing (column 4, lines 2-3, wherein matching is equivalent to comparing).

Regarding **claim 5**, Zenchelsky et al. discloses a method comprising the acts of: providing in a memory a mapping of predefined characteristics associated with packets and actions to be performed (column 3, lines 63-67 and column 4, lines 1-2, where the keys are predefined characteristics and the action are paired together in the memory); receiving packets to be classified (column 4, lines 2-3); correlating selected characteristics of received packets with the predefined characteristics (column 4, lines 2-4); and performing stored actions on said received packets, if the selected characteristics match the predefined characteristics (column 4, lines 6-8). Zenchelsky et al. does not disclose having actions include Layer 3 or higher frame classification actions. The general concept of using a cache containing predetermined packet characteristics and their associated actions to classify Layer 3 or higher packets is well known in the art as illustrated by Spinney et al. Spinney et al. teaches a system where packets classification is performed at Layer 3 or higher (column 2, lines 18-28, where the system classifies Layer 4 packets), and the system uses a cache table to classify packets by using already seen packets for assistance (column 8, lines 38-45, where a packets is hashed and matched against previous flows of packets, and then it is appropriately scheduled and routed, seen as actions). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Zenchelsky et al. with Layer 3 or higher packet classification as taught by Spinney et al. in order to increase

the efficiency of packet classification as to increase bandwidth to streaming applications as noted in Spinney et al.'s disclosure in column 2, lines 2-15.

Regarding **claim 6**, Zenchelsky et al. and Spinney et al. disclose the method of claim 5, and Zenchelsky et al. further teaches wherein the correlating act includes comparing (column 4, lines 2-3, wherein matching is equivalent to comparing).

Regarding **claim 7**, Zenchelsky et al. and Spinney et al. disclose the method of claim 5, and Zenchelsky et al. further teaches wherein the predefined characteristics include Source Address (SA), Destination Address (DA), Source Port (SP), and Destination Port (DP) (column 2, lines 1-25, with the filtering being based on source address and port and destination address and port).

Regarding **claim 8**, Zenchelsky et al. and Spinney et al. disclose the method of claim 5, and Zenchelsky et al. further teaches wherein the received packets are data packets (column 2, lines 1-5, where the packets used for filtering are involved in application processes, seen as data packets)

Regarding **claim 9**, Zenchelsky et al. and Spinney et al. disclose the method of claim 5, and Zenchelsky et al. further teaches wherein the stored actions associated with predefined characteristics are updated only from a first packet of a group of packets (column 3, lines 65-67 to column 4, lines 1-2, where a filter rules are applied only to a first packet in a message that shares a same key and the cache is updating only from the filter rule base).

Regarding **claim 10**, Zenchelsky et al. and Spinney et al. disclose the method of claim 9, and Zenchelsky et al. further teaches wherein the stored actions are being

performed on all packets following the first packet of the group of packets (column 4, lines 8-10).

Regarding **claim 22**, Zenchelsky et al. discloses a system including a memory that stores a mapping between predefined characteristics of packets and actions to be performed for a subset of the set of all characteristic values (column 3, lines 63-67, where the key is the predefined characteristic paired with an action, and the memory is derived from a filter rule base, therefore containing a subset of characteristics derived from already received packets); and a controller that correlates characteristics in a received packet with the predefined characteristics and performing the actions on said received packet if the characteristics match the predefined characteristics (column 4, lines 2-8, where the received packet is searched against the predefined characteristics and the paired action is applied to the packet if a match is found). Zenchelsky et al. does not disclose actions that classify Layer 3 or higher packets. The general concept of using a cache containing predetermined packet characteristics and their associated actions to classify Layer 3 or higher packets is well known in the art as illustrated by Spinney et al. Spinney et al. teaches a system where packets classification is performed at Layer 3 or higher (column 2, lines 18-28, where the system classifies Layer 4 packets), and the system uses a cache table to classify packets by using already seen packets for assistance (column 8, lines 38-45, where a packets is hashed and matched against previous flows of packets, and then it is appropriately scheduled and routed, seen as actions). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Zenchelsky et al. with Layer 3 or higher packet

classification as taught by Spinney et al. in order to increase the efficiency of packet

classification as to increase bandwidth to streaming applications as noted in Spinney et

al.'s disclosure in column 2, lines 2-15.

Regarding **claim 23**, Zenchelsky et al. discloses a computer readable medium

comprising computer-executable instructions that, when executed by a processor,

produce a method that comprises: correlating characteristics of a received packet with

characteristics in a table (column 4, lines 2-4, where a cache memory is searched for a

matching entry, seen as characteristics in a table, when a packet is received), said table

containing a subset of all possible characteristic values (column 3, lines 63-67, where

the cache memory is derived from a filter rule base, therefore containing a subset of

characteristics derived from already received packets); and enforcing an action stored in

said table on the received packet if the characteristics of the received packet and the

characteristics in the table match (column 4, lines 6-8, where the received packet is

searched against the predefined characteristics and the paired action is applied to the

packet if a match is found). Zenchelsky et al. does not disclose actions that facilitate

Layer 3 or higher packet classification. The general concept of using a cache

containing predetermined packet characteristics and their associated actions to classify

Layer 3 or higher packets is well known in the art as illustrated by Spinney et al.

Spinney et al. teaches a system where packets classification is performed at Layer 3 or

higher (column 2, lines 18-28, where the system classifies Layer 4 packets), and the

system uses a cache table to classify packets by using already seen packets for

assistance (column 8, lines 38-45, where a packets is hashed and matched against

previous flows of packets, and then it is appropriately scheduled and routed, seen as actions). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Zenchelsky et al. with Layer 3 or higher packet classification as taught by Spinney et al. in order to increase the efficiency of packet classification as to increase bandwidth to streaming applications as noted in Spinney et al.'s disclosure in column 2, lines 2-15.

Regarding **claim 24**, Zenchelsky et al. and Spinney et al. disclose the computer readable medium of claim 23, and Zenchelsky et al. further teaches including instructions to generate the table containing the characteristics and associated actions (column 3, lines 63-67 and column 4, lines 1-2, where generating the table consists of adding a cache entry for each first packet received).

Regarding **claim 25**, Zenchelsky et al. and Spinney et al. disclose the computer readable medium of claim 24, and Zenchelsky et al. further teaches including instructions to maintain the table (column 5, lines 1-12, where using the version numbers to eject outdated session entries is seen as maintaining the table).

Regarding **claim 26**, Zenchelsky et al. and Spinney et al. disclose the computer readable medium of claim 25, and Zenchelsky et al. further teaches wherein the instructions to maintain further includes instruction to delete aged entries and insert new entries (column 5, lines 35-39).

Regarding **claim 27**, Zenchelsky et al. and Spinney et al. disclose the method of claim 1, and Zenchelsky et al. further teaches wherein the at least one packet received in (b) satisfies a Frequent Flyer criteria of being one packet within a short burst of

packets belonging to the same session (column 4, lines 1-6, where the first packet received is part of a series of packets with the same key).

.Regarding **claim 28**, Zenchelsky et al. and Spinney et al. disclose the system of claim 22, and Zenchelsky et al. further teaches including aging mechanism operatively coupled to the memory, said aging mechanism periodically deleting old entries from said memory (column 5, lines 35-39, where the aging mechanism is seen as the process that deletes the entries, which would have to have access to the memory itself).

Regarding **claim 29**, Zenchelsky et al. and Spinney et al. disclose the system of claim 28, and Zenchelsky et al. further teaches wherein old entries are being deleted based upon a predefined criteria (column 5, lines 1-11, with the predefined criteria being the version number).

3.   **Claims 11-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al. (US 5,842,040) in view of Spinney et al. (US 6,226,267) and further in view of Zaumen et al. (US 6,118,760).

Regarding **claim 11**, Hughes et al. discloses a system including a processor (column 2, lines 54-57); a cache operatively coupled to said processor (column 3, lines 36-39), said cache storing a mapping between predefined characteristics of packets and actions wherein said processor executes a first program that causes said processor to correlate characteristics of selected packets with the predefined characteristics (column 2, lines 57-60, where the policy is selected from a plurality of policies matched to the received PDU packet, these policies being seen as equivalent to characteristics of packets) and enforcing on said selected packets actions associated with predefined

characteristics if characteristics from the selected packets match the predefined

characteristics (column 3, lines 5-9, where the PDU has a policy applied to it from the

policy cache). Hughes et al. does not disclose a memory operatively coupled to said

processor and storing therein: a first data structure for a full packet search wherein said

processor executes a second program that causes said processor to access the first

data structure and imposing on said selected packet an action stored in said first data

structure if a mismatch occurs between the predefined characteristics and the

characteristics from the selected packets. The general concept of including a data

structure for a full packet search if a mismatch occurs is well known in the art as

illustrated by Spinney et al. Spinney et al. describes a system that performs packet

classification using a cache, but also uses a full table in the case of a cache table

mismatch (column 7, lines 26-32, where the fast pattern matching is not appropriate or

fails, the entire Hash table is used for packet lookup). It would have been obvious to

one of ordinary skill in the art at the time of invention to modify Hughes et al. with full

table lookup on cache lookup mismatch as taught by Spinney et al. in order to expedite

the packet classification as to increase the efficiency of packet classification to increase

bandwidth to streaming applications as noted in Spinney et al.'s disclosure in column 2,

lines 2-15. Hughes et al. and Spinney et al. do not teach a second data structure that

includes an aging algorithm for aging the cache, the aging algorithm initializes an

expiration timer, decrements the expiration timer by a check time interval that is less

than a current value of the expiration timer, reviews a Layer 3 or Layer 4 database for a

change to the Layer 3 or Layer 4 database, and purges the cache if a change has been

made during the check time interval. The general concept of including such a timing

algorithm is well known in the art as illustrated by Zaumen et al. Zaumen et al.

describes a system for management of the cache memory. Zaumen et al. sets a first

timer when a new block is created (seen as a expiration timer), and then starts a

second timer (seen as a check time interval) when the first timer runs out if the block is

still active. The process repeats with every second time expiration, and in this process,

the block is checked for its state of activity (seen as reviewing a database for changes

in the database), and once it is inactive, the system deletes the entry if the entry in the

database becomes inactive. This whole procedure is described in column 8, lines 21-

51. Zaumen et al.'s system can be used for Layer 3 or 4 packets as noted in column 5,

lines 7-11. It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Hughes et al. and Spinney et al. with using an aging algorithm as

taught by Zaumen et al. in order to efficient use of the memory available as noted in

Zaumen et al.'s abstract.

Regarding **claim 12**, Hughes et al., Spinney et al., and Zaumen et al. disclose

the system of claim 11, and Hughes et al. further teaches wherein the predefined

characteristics include Source Address (SA), Destination Address (DA), Source Port

(SP) and Destination Port (DP) (column 5, lines 30-45, with the policies including

filtering based on these criteria or any combination of criteria).

Regarding **claim 13**, Hughes et al., Spinney et al., and Zaumen et al. disclose

the system of claim 11, and Hughes et al. further teaches wherein the processor

includes a network processor (column 2, lines 50-57, with any network device including

a processor can perform this process).

Regarding **claim 15**, Hughes et al., Spinney et al., and Zaumen et al. disclose

the system of claim 11, and Hughes et al. further teaches having the packets used for

caching include received packets as required by claim 15 (column 2, lines 63-65, with a

PDU being a packet received).

4.   **Claims 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hughes et al. (US 5,842,040), Spinney et al. (US 6,226,267), and Zaumen et al. (US

6,118,760) as applied to claim 11 above, and further in view of Bass et al. (US

6,460,120 B1).

Regarding **claim 16**, Hughes et al., Spinney et al., and Zaumen et al. disclose all

of the limitations as described above except for using a full match algorithm to search

the table. The general concept of using a full match algorithm is well known in the art

as illustrated by Bass et al. Bass et al. discloses frame lookups in a table using a fixed

match tree (column 8, lines 1-3, where a fixed match tree requires an exact match,

which is seen as being equivalent to a full match). It would have been obvious to one of

ordinary skill in the art at the time of invention to modify Hughes et al., Spinney et al.,

and Zaumen et al. with using a full match search algorithm as taught by Bass et al. in

order to use known search algorithms to increase speed and flexibility as noted in Bass

et al.'s disclosure in column 3, lines 18-20.

Regarding **claim 17**, Hughes et al., Spinney et al., and Zaumen et al. disclose all

of the limitations as described above except for using a longest prefix match algorithm

to search the table. The general concept of using a longest prefix match algorithm is well known in the art as illustrated by Bass et al. Bass et al. discloses frame lookups in a table using a longest prefix match tree (column 8, lines 1-5). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Hughes et al., Spinney et al., and Zaumen et al. with using a longest prefix match search algorithm as taught by Bass et al. in order to use known search algorithms to increase speed and flexibility as noted in Bass et al.'s disclosure in column 3, lines 18-20.

Regarding **claim 18**, Hughes et al., Spinney et al., and Zaumen et al. disclose all of the limitations as described above except for using software managed tree algorithm to search the table. The general concept of using a software managed tree algorithm is well known in the art as illustrated by Bass et al. Bass et al. discloses frame lookups in a table using a software-managed tree (column 8, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Hughes et al., Spinney et al., and Zaumen et al. with using a software managed tree search algorithm as taught by Bass et al. in order to use known search algorithms to increase speed and flexibility as noted in Bass et al.'s disclosure in column 3, lines 18-20.

Regarding **claims 19 and 20**, Hughes et al., Spinney et al., and Zaumen et al. disclose all of the limitations as described above except for having the memory internal or external to the processor. The general concept of placing the memory external or internal to a processor is well known in the art as illustrated by Bass et al. Bass et al. has memory external to the processors, but the combination of memory and processors create a network processor system (Abstract). It would have been obvious to one of

ordinary skill in the art at the time of invention to modify Hughes et al., Spinney et al.,

and Zaumen et al. with using memory external to the processor and also internal to the

entire network processor as taught by Bass et al. in order to create a network processor

in one physical unit as to save money and space, and increase the flexibility of the

network processor as noted in Bass et al.'s disclosure in column 3, lines 18-20.

Regarding **claim 21**, Hughes et al., Spinney et al., and Zaumen et al. disclose all

of the limitations as described above except for using a Direct Table and Patricia tree as

the data structure. The general concept of using a Direct Table and Patricia tree is well

known in the art as illustrated by Bass et al. Bass et al. discloses a frame lookup

method using a Direct Table and Patricia Tree (column 25, lines 54-61). It would have

been obvious to one of ordinary skill in the art at the time of invention to modify Hughes

et al., Spinney et al., and Zaumen et al. with using a Direct Table and Patricia tree as

taught by Bass et al. in order to use known data to increase speed and flexibility as

noted in Bass et al.'s disclosure in column 3, lines 18-20.

5.   **Claim 30** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Zenchelsky et al. (US 6,173,364) and Spinney et al. (US 6,226,267) as applied to claim

29 above, and further in view of Li (US 6,754,662).

Regarding **claim 30**, Zenchelsky et al. and Spinney et al. disclose all of the

limitations as described above except for deleting recently used entries when memory is

full and a new entry needs to be added. The general concept of deleting entries to free

memory and to replace the entries with new ones is well known in the art as illustrated

by Li. Li discloses a cache management system that deletes the entries when the

cache is full and inserts a new entry as well (column 4, lines 30-35, with the new entry

made for the incoming packet that causes an old entry to be erased if the memory is

full). It would have been obvious to one of ordinary skill in the art at the time of

invention to modify Zenchelsky et al. and Spinney et al. with this cache management as

taught by Li in order to accurately and consistently classify Layer 4 information as noted

in Li's disclosure in column 2, lines 5-10.

6.   **Claims 31-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hughes et al. (US 5,842,040) in view of "Filters to Detect, Filters to Protect" (McLachlan

et al.).

Regarding **claim 31**, Hughes et al. discloses a method of classifying packets in a

communications network comprising acts of: (a) receiving packets in a network device

(column 2, line 61); (b) determining data packets present in received packets (column 3,

lines 15-24, with grouping the packets together by any field could include TCP flag

information as seen in column 5, lines 34-44, and this classification can inherently

determine if it's a data packet or a non-data packet (data packets do not set the

Synchronize flag or the Finish flag)); (c) providing a cache in which predefined

characteristics of packets and actions associated with selected ones of the predefined

characteristics are stored (column 3, lines 36-39, where policy data is seen as

predefined characteristics); for each data packet so determined, correlating selected

characteristics of said each data packet with the predefined characteristics in said

cache (column 3, lines 27-31); and for each data packet with selected characteristics

matching one of the predefined characteristics imposing on said each data packet the

action associated with said one of the predefined characteristics (column 3, lines 30-35,

where policies are applied to matching packets with the matching policy information),

wherein the packets include TCP/IP packets (column 14, lines 14-18), and wherein the

determining act further includes the acts of: examining the control bits in the TCP

header (column 5, line 41, where the TCP flags are found in the TCP header). Hughes

et al. does not disclose if selected ones of the control bits are set to a first state,

examining a length field in the IP header to determine its value, multiplying a value in

the data offset field in the TCP header by 4, and subtracting the result of the

multiplication from the value in the length field. The general concept of performing

these mathematical operations to determine the TCP data if one of the control bits are

set to a first state is well known in the art as illustrated by McLachlan et al. McLachlan

et al, describes setting up a packet filter to discriminate or classify packets. On pages

9-10, McLachlan et al. describes the steps necessary to extract the TCP payload length.

First, a check for a SYN flag is made, seen as a control bit being set to a first state, and

then the TCP header length (seen as offset field) is multiplied by 4 and subtracted from

the IP header length. It would have been obvious to modify Hughes et al. with

extracting TCP payload information as taught by McLachlan et al. in order to examine

fields in the TCP for certain kinds of activity as noted in McLachlan et al.'s page 1.

Regarding **claims 34-35**, Hughes et al. and McLachlan et al. teach the method of

claim 31 as described above, with McLachlan further teaching the first state being a

logical "0" and having the selected ones of the control bits include SYN, FIN, and RST

flags. The general concept of examining these control bits in the TCP header and

checking to see if they are a logical "0" is well known in the art as illustrated by

McLachlan et al. McLachlan et al. teaches checking for the SYN flag explicitly and then

checking the TCP payload length, however this involves masking byte 13 of the TCP

header to retrieve the control bits (page 7). The mask returns a number corresponding

to what control bits are set, and what control bits are at a logical "0". Byte 13 is

displayed in Figure 17.5, and example mask returns are listed in page 8. This is seen

as checking SYN, FIN, and RST flags and also determining logical "0's" before

examining the TCP payload length. It would have been obvious to modify Hughes et al.

with using any one of the selected TCP control bits and checking for a logical "0" before

extracting TCP payload information as taught by McLachlan et al. in order to examine

fields in the TCP for certain kinds of activity as noted in McLachlan et al.'s page 1.

Response to Arguments

7.   Applicant's arguments with respect to claims 1-35 have been considered but are

moot in view of the new ground(s) of rejection.

Summary of Arguments

1.   Applicant has amended the claims 1, 5, 9, and 25 to overcome minor

informalities to withdraw the objections made.

2.   Applicant has amended the claims 23-26 to overcome the rejection under

35 U.S.C. 101 to withdraw the rejection made.

3.   Applicant argues the rejection of claims 1-7, 9, 10, and 22-29 under 35

U.S.C. 102(b) as being anticipated by Zenchelsky et al. should be withdrawn as

Zenchelsky et al. fails to teach every aspect of the claim as amended.

4.   Applicant argues the rejection of claims 11-13 and 31-32 under 35 U.S.C.

102(b) as being anticipated by Hughes et al. should be withdrawn as Hughes et al. fails

to teach every aspect of the claim as amended.

5.   Applicant argues the rejection of claim 8 under 35 U.S.C. 103(a) as being

unpatentable over Zenchelsky et al. in view of Hughes et al. should be withdrawn as

claim 8 is dependent from the traversed rejection of claim 5.

6.   Applicant argues the rejections of claims 14-15 under 35 U.S.C. 103(a) as

being unpatentable over Hughes et al. in view of Guide should be withdrawn as claim

14 has been canceled and claim 15 is dependent from the traversed rejection of claim

11.

7.   Applicant argues the rejections of claims 16-21 under 35 U.S.C. 103(a) as

being unpatentable over Hughes et al. in view of Guide and further in view of Bass et al.

should be withdrawn as claims 16-21 are dependent from the traversed rejection of

claim 11.

8.   Applicant argues the rejections of claim 30 under 35 U.S.C. 103(a) as

being unpatentable over Zenchelsky et al. in view of Lubkin et al. should be withdrawn

as claim 30 is dependent from the traversed rejection of claim 22.

9.   Applicant argues the rejections of claims 33-35 under 35 U.S.C. 103(a) as

being unpatentable over Hughes et al. in view of TCP should be withdrawn as claim 33

has been canceled and claims 34-35 are dependent from the traversed rejection of

claim 31.

Response to Arguments

1.   The claim amendments overcome the objections made to claims 1, 5, 9,

and 25 due to minor informalities.

2.   The amendments made to claims 23-26 overcome the rejection under 35

U.S.C. 101 and the rejection is withdrawn.

3.   The amendments to the claims have overcome the rejection under 35

U.S.C. 102(b) under Zenchelsky et al. for the claims 1-7, 9, 10, and 22-29, however the

argument is moot in view of the new grounds of rejection under 35 U.S.C. 103(a) under

Zenchelsky et al. in view of Spinney et al. The prior art reference Zenchelsky et al.

establishes a prima facie case of obviousness to one of ordinary skill in the art at the

time of invention as it suggest the claimed invention when combined with Spinney et al.

4.   The amendments to the claims 11-13 and 31-32 have overcome the

rejection under 35 U.S.C. 102(b) under Hughes et al., however the argument is moot in

view of the new grounds of rejection under 35 U.S.C. 103(a) under Hughes et al. in view

of Spinney et al. and further in view of Zaumen et al. and under Hughes et al. in view of

"Filters to Detect, Filters to Protect" (McLachlan et al.). The prior art reference Hughes

et al. establishes a prima facie case of obviousness to one of ordinary skill in the art at

the time of invention as it suggest the claimed invention when combined with Spinney et

al., Zaumen et al., and McLachlan et al.

5.   The argument regarding claim 8 is moot in view of the new grounds of rejection under 35 U.S.C. 103(a) under Zenchelsky et al. in view of Spinney et al. The prior art reference Zenchelsky et al. establishes a prima facie case of obviousness to one of ordinary skill in the art at the time of invention as it suggest the claimed invention when combined with Spinney et al.

6.   The argument regarding claims 14-15 is moot in view of the new grounds of rejection under 35 U.S.C. 103(a) under Hughes et al. in view of Spinney et al. and further in view of Zaumen et al. The prior art reference Hughes et al. establishes a prima facie case of obviousness to one of ordinary skill in the art at the time of invention as it suggest the claimed invention when combined with Spinney et al. and Zaumen et al.

7.   The argument regarding claims 16-21 is moot in view of the new grounds of rejection under 35 U.S.C. 103(a) under Hughes et al. in view of Spinney et al. and further in view of Zaumen et al., and further in view of Bass et al. The prior art reference Hughes et al. establishes a prima facie case of obviousness to one of ordinary skill in the art at the time of invention as it suggest the claimed invention when combined with Spinney et al., Zaumen et al., and Bass et al.

8.   The argument regarding claim 30 is moot in view of the new grounds of rejection under 35 U.S.C. 103(a) under Zenchelsky et al. in view of Spinney et al. and further in view of Li. The prior art reference Zenchelsky et al. establishes a prima facie case of obviousness to one of ordinary skill in the art at the time of invention as it suggest the claimed invention when combined with Spinney et al. and Li.

9.   The argument regarding claims 33-35 is moot in view of the new grounds

of rejection under 35 U.S.C. 103(a) under Hughes et al. in view of "Filters to Detect,

Filters to Protect" (McLachlan et al.).   The prior art reference Hughes et al. establishes

a prima facie case of obviousness to one of ordinary skill in the art at the time of

invention as it suggest the claimed invention when combined with "Filters to Detect,

Filters to Protect" (McLachlan et al.).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Adam S. Weintrop whose telephone number is 571-270-

1604. The examiner can normally be reached on Monday through Friday 7:30am-

5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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AW

4/25/07

FRANTZ JULES
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